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BY A. B. DUNDOR, M. D.

Another year of the life of our society is ended. The wheel of time has moved one notch further on its endless course. Our good deeds, as well as our misdeeds, are matters of record, from whence there is no appeal. Let us hope that the former overbalance the latter, and that the world is somewhat the better by our having been in it.

I cannot say that the society during the last year prospered any better than under the administration of my predecessors; I will not admit that it did any worse.

Some meetings were fairly well attended, interesting papers were read and discussed, some new members were added to our number, and, at last, but not least, every member is now in possession of a nicely-printed copy of our constitution and by-laws—a long-felt want realized.

With these few introductory remarks I will now endeavor to elicit your interest to what I deem as possibly the most important and the most far-reaching subject in sanitary science, namely,

SCHOOL HYGIENE.

Inasmuch as we claim to be physicians and surgeons, which implies that we are educated and equipped with the necessary means at command to cure diseases and heal the wounded, let us not forget that we are, and if not, should also be, sanitarians and know how to prevent diseases, as well as curing the same.

Hygiene and sanitation has become a science, and rapid progress is

*Read before the Berks County Medical Society, Jan. 8, 1895.

being made in a knowledge of them, and in putting them to practical use and application, still there is a wide field here remaining open for further study and investigation.

Whilst at the present time your minds may be occupied with the great advancement that our city is engaged in, by constructing a system of both storm and house sewers, and thereby opening its gates wide for a great flood of sanitary light to pour into among our large population; and, whilst occasionally you may be turning up your noses in the presence of a foul water-closet, or at the sight of a heap of rubbish with decomposing garbage, or a filthy and stagnant pool of water, please do not forget our thousands of innocent school children whose life, health, and the normal or abnormal development of their bodies are at stake in proportion according to their sanitary or insanitary surroundings.

We must remember that we are responsible for the well-being of our children, and any neglected effort on our part to contribute to and promote a healthy growth and development of their physical organizations and bodily vigor, constitutes a most sacred duty unperformed.

The greater the number of individuals massed together, the greater is the danger of being affected injuriously by unsanitary surroundings. It has been well determined by some of our best scientists, both in this country and in Europe, that in order to maintain a proper standard of health amongst the pupils of our public schools a certain amount of pure air must be constantly supplied whilst a corresponding amount of impure air must be got rid of in the school room; that the temperature in the room dare be neither too high

nor too low; that a certain amount of pure light must be introduced; that the seats and desks must be of a proper construction in their relation to each other and to the pupils; that the rooms must not be subjected to the penetration of obnoxious gases, odors or noises; that the children's clothing must be cared for in suitable closets outside of the school room; that strict cleanliness of the rooms, as well as of the pupils' persons, must be observed; that plenty of bodily exercise must be enforced, and that overtraining of the mental faculties by too heavy tasks must be avoided.

Having a few years ago devoted about one-half of my time for a period of two years to the study and a thorough sanitary investigation of the public schools of our city, let me draw a comparison of their actual existing condition with well-tested and generally accepted rules pertaining to school hygiene, and point out many defects, some of which could easily be remedied, or at least be improved.

The whole subject may be divided as follows, viz.: First, heat and ventilation; second, light and shading; third, furniture; fourth, clothing; fifth, overcrowding; sixth, plumbing and water-closets; seventh, mental pressure; eighth, free text books and the common drinking cup; ninth, general condition and surroundings of the school buildings; tenth, janitors. Then I will add the duties of the school controllers and the general practitioners of medicine.

I will state here that in a paper like this it will be impossible to go into any extensive details upon all the subjects just mentioned. I will endeavor to give a little more than simply an outline in order that I may be properly understood.

In the consideration of heating and ventilation, let it be understood that from 1400 to 3500 cubic feet of air should be furnished to each scholar hourly, and that the air contents of the room are required to be evacuated from five to twelve times during an hour, which requires a change of the entire contents once in every 8 1-2 minutes. It is, therefore, very

apparent that quite extensive means must be provided to draw into or force in the air from the outside as well as similar means to drive it or suck it out of the rooms again. Then, that this large and ever-changing volume of air remain at a regular and proper temperature during cold weather indicates the vast responsibility and resources that must necessarily be brought into requisition to meet the requirements of proper heating and ventilation. When you have a school room of about 20 by 30 feet, with from 40 to 50 pupils, it requires an aperture of about 10 feet square, say, about five registers with gratings, each one foot wide and two feet long, to admit a sufficient quantity of fresh air, the air to have a velocity of 3.3 feet per second.

Now, you must have a similar provision to get rid of the air again as it becomes foul and unfit for breathing. This air in the room must also be kept warm, at about a temperature of from 65 degrees to 70 degrees which, by virtue of this continuous interchange of air, requires a furnace or other heating apparatus of very large capacity; bearing in mind that the air dare not be overheated or burnt, and that air killed in this manner becomes just as intolerable and objectionable as foul air. Again, all this air must be introduced, heated and got rid of again without subjecting the occupants of the room to dangerous draughts.

All air introduced into the school room, either direct or through the heating furnace, should be drawn from the outside of the building about ten or twelve feet above the surface of the ground, in order to avoid the lower stratas of air, which are always damp and the more heavily charged and miasmatic influences and other deleterious substance, resulting from surface decomposition.

The best system to meet these indications that I have met with is the Smead system of heating and ventilating, which is now employed in the Laurel street school and a few of the lately-erected buildings. This system has a very extensive provision to feed its furnaces with fresh air

from the outside of the building (though, unfortunately, from the ground level), which, being warmed, is conducted through a large register into the school on a level above the heads of the pupils, the foul air being at the same time sucked out through a large number of small exits along the level of the floor, which lead to a main shaft, that is constantly heated, and thus a continuous and healthy circulation of air is maintained without incurring any cold draughts over the heads of the children.

The next in efficiency are those arrangements employed in the Twelfth and Windsor, Tenth and Union, and the Boys' High School. I could not get the name of the system. But a large amount of fresh air is drawn from the outside, and the foul air flues run down into the cellar, into the heating furnace, which promotes a strong suction and a good foul-air ventilation.

In a few other buildings are found in each room a foul air register directly into the chimney, which is not a bad idea for the abduction of foul air.

Now, in a majority of the buildings we meet the following conditions, viz.: They are heated either by steam, or hot-air furnaces in the cellar. If by steam, no provision is made to introduce fresh air from the outside, excepting one building, that at Seventeenth and Cotton streets; if by hot air, a portion or a whole of a cellar window, which generally is very small, is the full extent of all the fresh air admitted, and supplied to one-half or the whole of the building.

In some buildings there is no inlet whatever from the outside, being heated either by stoves or furnaces in the cellar, which have their air-feeding inlets direct from the cellar floor; a number of these, if not all, have been changed since I visited them, by running a box flue from the furnace to a cellar window, and thus feed from the outside instead of direct from the cellar. No more villainous stuff could be sent into the school room than the damp, dusty and mouldy air from the cel-

lar; all cellars generally are poorly lighted and ventilated. In stove heating of a school room there is a chance for some to roast, some to freeze, and if any escape either, they may smother with foul air; yet, we find three and a half buildings altogether so heated.

Now, what provision do we find to extract the foul air? With the few exceptions first mentioned, there is absolutely nothing outside of open doors or windows. You will find almost in every room from two to four small flues in the wall, with a small register, say about 8 by 12 inches, located either near the floor or near the ceiling. These flues commence either in the cellar or on the first floor, and end in the loft, without penetrating the roof, are not heated, and in many instances have their registers closed or obstructed with cobwebs, dust, loose plastering, etc., and at best will only convey the dust and damp air of the cellar into the rooms on the first floor, or the foul air from the rooms on the first to those of the second floor. If these flues were connected, and then continued through and above the roof of the building, closed to the cellar, and have heat introduced into them to drive the column of cold air they contain out at the top, and thus create a suction, they could be made to subserve a valuable purpose.

As they are, they are only calculated to deceive, and are practically of no account whatever. All the fresh air that reaches the rooms from these heating furnaces is conducted into them through one or two registers of about one to two feet in diameter. This is very far from ten feet square, as we stated in the beginning, the necessary requirements called for. This necessitates altogether a window ventilation, which furnishes now the only avenue by which fresh air is introduced or foul air extracted, and at best is far from sufficient, besides subjecting the pupils to highly prejudicial draughts of cold air, by which many contract more or less serious colds, if not some inflammatory fever, such as pneumonia, pleurisy, acute bronchitis, etc., providing that this ventilation is done the us-

ual way, by raising the lower sash or lowering the upper one.

Window ventilation we must have in these buildings, and it can be very readily done without any danger of injurious draught by simply putting under the lower sash a narrow strip of wood, so as to raise it sufficiently to break the connection between the upper and lower sash, which will give a space of about a 1-2 or 3-4-inch sheet of fresh air to pour into the room with an upward direction, and thus striking the ceiling, it will be warmed and of an even temperature when it reaches the heads of the scholars.

The School Board, by resolution, has given the Reading Steam Heating Company the contract of heating the new Girls' High School Building, which, in my opinion, is a most egregious blunder.

That company can no more heat that building and at the same time afford efficient ventilation, than that I can fly to the moon. It is simply another result of jealous and revengeful factional quarreling, and the public, of course, is supposed to pay the piper.

Just take the City Hall for an example. The company can never heat it satisfactorily. Whilst in very cold weather the rooms on the south side may be warm enough, those on the north side are too uncomfortably cold to stay in them; in fact, the radiators are hardly warm; and mind you here, all the windows and doors are closed and no cold air from the outside is admitted. The metre in the basement generally registers a pressure of half a pound. Now, draw from 1400 to 3500 cubic feet of cold air for each pupil every hour in the Girls' High School building, and keep that warm, and you will have quite a different task before you. It would have to be done by indirect radiation, which would require radiators of immense capacities, which could not be kept at the required heat in a steady and continuous way the whole day through, from a plant that runs its steam over a large territory of our city.

Why not abide by the original con-

tract, which includes the Smead System, which system is acknowledged by all disinterested people to be the best in use up to this time?

This system has proved itself capable of doing the work to the fullest satisfaction.

LIGHT.

Lighting a school room properly requires a glass capacity that is equal to 1-6th to 1-4th of the floor surface, and furnish 2 1-2 square feet of glass to each pupil. There should be a sufficient number of large windows, commencing about four feet from the floor, and extending to as near to the ceiling as possible, since it is the upper section of the windows that furnishes the best quality of light. In comparing the lighting of our school houses I cannot go into details as to every building; sufficient to say that we find it to compare with the floor capacity in proportion all the way from 1-4 down to 1-17, and averaging to each pupil from 3 down to .62 of square feet. The majority average from 1 to 2 square feet to the pupil, thus making it quite apparent that, all taken together, the existing light capacity is decidedly very deficient. I notice in the latest buildings that the School Board have erected this deficiency is overcome by the proper method of construction, in having a large hall running through the centre and leaving the whole outside wall surfaced for the introduction of plenty of large windows.

If you wish to see a genuine piece of nonsense in this direction, examine the Laurel street building, otherwise such a fine and model building. You will find there in the south rooms eight windows, and an abundance of light supply; but in the north rooms you will find only four windows, and one of them directly under a roof over the steps, thus giving them a very small amount of light; and all this for the sake of ornamentation, to give the building a nice appearance on Laurel street.

It is this insufficiency and badly-managed lighting of the school rooms

that constitutes one of the main factors in furnishing numerous victims for our specialists on diseases of the eye.

SHADING.

Italian canvas screens are recommended as the best. The common cloth of a light brown, yellow or blue color with rollers is very good. And shades with slats are also highly recommended; this has reference, however, to slatted shades made of very light material, and that are pulled up and down the same as a cloth shade. When I began my work in the schools, I found in many buildings very heavy double inside shutters, each with a double row of slats. This was, indeed, a miserable and highly injurious arrangement. When closed for shading purposes they would cut off the entrance of light, and in warm weather also render the rooms very hot and close.

Furthermore, they presented an immense surface for dust to collect on, which is another prejudicial feature, in that dust, together with the moist breath of the school children, constitute a most fertile soil for the development of bacteria or disease germs. Afterwards, when by instruction from the Board of Health to communicate the villainous condition of the Franklin School building to the school board, I found that those inside shutters were all taken out of every building excepting the east section of the Edwin Ziegler building, on Douglass and Tenth street, and the Thomas Severn building, on South Seventh street. Two common shades, with rollers, one from the middle and the other from the top of each window, answer about as a good a purpose as any other arrangement for proper shading.

FURNITURE.

In the consideration of furniture we will include the seats, desks and blackboards. There we find one of the greatest items for sanitary reform in the whole field of school hygiene. The desks and seats should

be single, each accommodating but one pupil, of proper height and proportion; a correct relation must exist between the two; and, furthermore, a correct relation must exist between the desks and seats and the pupils who occupy them. There will be invariably some small and some tall children with a variety of intermediate sizes between them in the same room and grade. In the first place there should be from five to eight different sizes in each room. If this could not be done, then three well-regulated sizes would improve the matter very much. The following proportions should be secured, viz., the height of desks from 17 1-2 to 31 1-2 inches, height of seats from 12 to 21 inches, distance between seat and desk from 6 to 10 inches; the edge of the seats should fall about two inches inside of the edge of the desk, and the point of the elbow of the pupil should be from 1-2 to 1 inch below the edge of the desk; fixed desks should have a slope of about 45 degrees.

In our schools we find height of desks from 20 to 30 inches, height of seats from 12 to 24 inches, distance between seats and desks from 8 to 12 inches, relation of edge of seat to edge of desk from 3 inches inside to 3 1-2 inches outside, and the relation of elbow to edge of desks from 0 to 7 inches below. This shows that the height of the seats and desks, so far as the two extremes are concerned, would be about right, providing there were a number of intermediate sizes between the two. By my examination I think I found only about three distinct sizes, and only a few of one of them. In many of the primary departments the size of desks and seats are used that are used in the secondary or still more advanced grades. When we come to the distance between the seat and desk we find this generally too great, thus bringing the elbow of the scholar entirely too far below the edge of the desk, which necessitates or prompts the pupil unconsciously to raise one shoulder and assume a side and contorted position; which no doubt in many cases produces

curvature of the spine and severe eye-strain, inasmuch that, instead of having his work squarely before him, the scholar will bring one eye closer than the other to his work, and he views it in a sidelike manner, which compels his eyes to strike simultaneously two different foci. This constrained or contorted position will promote engorgement of the blood-vessels of both the brain and eyes. Furthermore, in the placing of the desks and seats we find this done very improperly and carelessly, when we observe that, instead of the edge of the seat being just two inches inside of the edge of the desk, there exists a distance all the way from 3 inches inside to 3 1-2 inches outside, which also makes the pupils lean forward and assume an unnatural position, which is apt to bring about deformity and eye-strain.

A great deal of mischief may be done by having the blackboards in an improper location, as well as requiring the scholars to read and copy from the same at a distance beyond their easy vision. Some may be able to see and read with perfect ease from the extreme rear part of the room, whilst others will find it extremely difficult and a torture to see and read from the middle of the room. These different capacities of sight should be made a study by the teachers so as to seat their pupils accordingly.

The blackboards should be directly in front of the pupils, and not to either side of them, so as to force them to turn in their seats. They should not have a polished surface, and no other color of crayon than black on a white surface or white on a black surface should be used. They should be in a well-lighted location, yet not receive the direct light of the sun. Our pupils have to do a great deal of blackboard work, and where proper conditions and eye capacity is not observed much injury to the eyes of many will follow.

I should have stated under the subject of light that light should not strike the pupil from the front or back alone, but from the left side

or both from the left and rear, when from the front it is too dazzling and when from the rear or right alone the person or hand and arm of the scholars shade their work.

(To be Continued.)

Society Reports.

CINCINNATI OBSTETRICAL SOCIETY, OCTOBER 25, 1894.

Continued from last number.

Dr. Palmer: The first case I think of reporting I presume no remarks need be made about, but it was one of the strangest cases I ever saw. It happened in the hospital, and the child was born dead in consequence of a foetal malformation. The head presented and was delivered, but there was great delay in delivery the body of the child, which required a great deal of traction to be made of the axillae of both sides. The child was living at the beginning of labor, but became more feeble during labor. Inspection shown it was malformed, its belly being unusually enlarged, containing a pint or more of ascitic accumulation. I directed a post-mortem examination to be made, and there was found the considerable ascitic accumulation, and both kidneys had undergone a cystic degeneration, only a trace of kidney tissue being left. There was a little urine in the bladder. It was a mercy the child was born dead, for it could have lived only a few hours, if it had been born alive.

The other case happened a week ago last Tuesday. I was telephoned by a brother practitioner to see a case which seemed to be dying. I had to lecture at four o'clock, and I saw the case with him at half-past five. The patient was still alive. What seemed to be the matter was extrauterine pregnancy. When the physician in charge of the case was called in the morning, from the size of the

uterus, and not being able to make out any other symptoms, he thought it was an abortion, but he abandoned that idea at noon when he was recalled. There was evidently much internal hemorrhage, although there was only a mere trace of blood at the vagina. At about 3 P. M. she was pulseless from internal hemorrhage. Owing to the fact that the pulse of the patient was slightly better at half-past five than two hours previous, and owing to the fact that it was then dark and no preparations were made we agreed to postpone an abdominal section until next morning. When I opened the abdomen the next morning, I found, as I suspected, a dark-colored peritoneum, and when this was incised there was expelled, when the patient was turned upon the side, perhaps a quart and a half of clotted blood. I put the patient then upon her back, and detached the sac containing the ovum, and ligated it, taking out the Fallopian tube, ovary and sac. The extra-uterine pregnancy was in the right tube near the uterus, extending down into the folds of the broad ligament. The tube was ruptured to the extent that I could easily introduce my finger, extending also in the folds of the broad ligament. I transfixed the right broad ligament completely, so as to excise the ovary, tube and sac, but after that I noticed there was yet some oozing. After much manipulation, I stitched the pampiniform plexus in two places. By that time I thought the patient was dead. She was absolutely pulseless, and I could not see her breathe, and she looked like a woman who had been dead for several hours. However, I proceeded to close the abdominal incision, having had injected about 15 or 16 syringefuls of whisky in the thigh and arm. In this pulseless state the patient was put to bed. Having injected a pint of hot salt water into the rectum, she began to rally, and is now rapidly on the way to recovery. The case illustrates that the only thing to do in that class of cases is to make the abdominal section and ligate the bleeding vessels. The pregnancy was supposed to be in the third month,

but I think it must have been more than that. The foetus proper I could not find. I suppose it was cast out in the peritoneal cavity and lost in the clots of blood.

Dr. Hall—Mr. President: I report a case of operation for ovarian tumor during pregnancy. I was called on the tenth of August, last year, to Greenville, Ohio, to see a patient with an abdominal tumor. The woman was 37 years of age, the mother of three children, the youngest 19 months old. She had noticed the enlargement for about three and a half months. I was not able to go for a week or so after the doctor asked me by letter to see his patient, and when I arrived the patient said she had already made the diagnosis, that she was pregnant, and that was all that was wrong; but she could not understand why she was so very large, for if pregnant she could not be more than four months so, because she usually felt the movements of the child at four months. However, they were anxious for me to examine the patient, which I did. I had no difficulty in outlining the uterus, apparently the size of a three-months' pregnant uterus. There was present a tumor considerably larger than an adult head, which had, apparently a very thin wall. It was in the midst of the hot weather, and I could not see why the patient could not wait at least until the hot weather was over before the operation was made, which I advised because of the rapid growth of the cyst. On the 19th of September the patient entered my private hospital, and on the 25th of September I operated, the tumor and contents weighing twenty-five pounds. The tumor itself weighed three and a half ounces. It was the thinnest-walled tumor I ever removed. It had a long pedicle, not a single adhesion, and the opposite ovary was healthy. I tied an inch and a half away from the uterus, but to my chagrin, an hour and a half after the patient was in bed, she had labor pains. The contractions of the uterus continued for about 24 hours, but at no time was there loss of blood per vagina, and the pain was controlled by morphia, grain

one-quarter every three or four hours, and it soon stopped. On the tenth of March, this year, the patient was delivered of an eleven and a half pound baby. The baby and mother are both well.

Dr. Zinke—Mr. President: I think Dr. Palmer is to be congratulated very much upon the result obtained in the case he reported. It simply demonstrates that we should not hesitate, even in private houses, to go ahead, even in extensive operations, and do what we can, for we have no time to wait. The patient often would die on the way to the hospital.

In reference to Dr. Hall's case, I may say, it is not so many years ago when it was quite a question in dispute whether we were justified in removing an abdominal tumor during pregnancy, but the results obtained during the last few years, in operating the abdomen even in pregnancy, have been such that when a tumor is found during pregnancy it is often our duty to interfere. The majority of cases recover. I have had but one case, and she recovered promptly, when home three weeks after the operation, and was delivered of a well-formed child at the end of the normal period of pregnancy. I think no excuses can be made for letting a woman advance in such cases with a tumor. There is no danger of the cyst being ruptured in such cases as Dr. Hall reported. Even if a miscarriage does take place after the removal of a tumor, the woman's chances are much better, for there is no reason why she should die after a miscarriage following an abdominal incision any more than after an ordinary miscarriage.

Dr. Hall—Mr. President: In reference to the case reported by Dr. Palmer. It is always a very grave question as to just when to operate, when you are called to see a case in such condition as the one he saw, when we consider the fact that the patient was apparently dying at four o'clock, and then at half-past five, after his arrival, was apparently better. The diagnosis was clear, and evidently the patient had lost a large quantity of blood. I was once placed

in a similar position myself; I have reported the case in detail. In that case I waited for the patient to react. She did apparently do so, and I operated eight or ten hours afterward. I saw her at ten o'clock at night, and operated early the next morning. At the time of my visit the patient had a pulse of 148 or 150, and the next morning we could count the pulse at 140. I gave her ether, operated and turned out a large quantity of blood clot, a foetus four and a half inches in length, placenta and tube; the patient recovered, but I think she would have had a better chance had I operated the night before. I think the amount of blood lost during the night more than counter-balanced anything gained by the delay, and if we had given ether and operated immediately I believe the patient would have gone through the operation better. When I saw her at first, the pulse was feeble, because of shock. The rupture had taken place shortly before. In those cases where there is pain and shock the feeble pulse is not due to the loss of blood, for they do not lose sufficient blood in half an hour or an hour to produce that result, but to shock. Eight or ten hours afterward, when there is a pint or more of blood in the abdomen, then they are in a condition to have a rapid feeble pulse from the loss of blood. Although the patient recovered, I think, as I said before, it was under less favorable circumstances than if I had operated at once. Everyone hates to operate when the patient seems dying at the time, but in a ruptured tubal pregnancy, where we know what we will find, if the patients do not die on the table from shock, they usually recover. Our actions must be based on the individual case, but, in a general way, the hemorrhage should be controlled the first moment possible, whether it is night or day. I do not hesitate a moment, so far as light is concerned; I would not hesitate to operate by one candle, for it is done by the sense of touch chiefly. Deferring the operation for the patient to get into a better condition is not likely to be best.

Dr. Zinke—Mr. President: I just wish to rise to ask a question of the gentleman as to the symptoms of extra-uterine pregnancy. In the last case I saw the symptoms were ushered in by severe pain, vomiting, diarrhoea and bloody stools, and I want to know whether in their experience any of the members have encountered something similar to that. The vomiting was excessive and the hemorrhage from the bowels quite profuse at the same time, so that there was almost a suspicion that it might be purely and simply an intestinal hemorrhage. The duration of the pregnancy was not quite two months, and the tube was torn from the horn on that side. The tube was perfectly normal, and there was a virgin os.

Dr. Palmer—Mr. President: I concluded to wait until we were better prepared to operate. Had I operated that night, I believe the patient would be dead to-day. We found two rents, one in the broad ligament, and one in the Fallopian tube, and it required a more careful inspection to find all the sites of hemorrhage than we could have obtained in the artificial light. The patient would have died from hemorrhage and shock, if the section had been prolonged from a bad light. It was a God-send that I postponed the operation for better light.

MOBILITY IN FRACTURES.

M. Bumm is an advocate of very moderate motion in fracture treatment, claiming that hasty immobilization often leads to unpleasant results, while, on the contrary, early massage and joint action, with gymnastics, favor restoration of muscular strength, articular motion and consolidation of the callus.

He authorizes massage throughout treatment. When the point of fracture is close to the joint he allows the dressings to remain undisturbed until the tenth or twelfth day, or a longer time with oblique fracture through the humerus or femur.

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SOMETHING MORE ON "SURGICAL SINS."

At the late meeting of the American Medical Association in San Francisco Dr. John B. Roberts, the chairman of the section on surgery, employed as a theme for his inaugural what he designated "Some Surgical Sins," and then unsparingly applied the lash of bitter invectives on those members of the surgical craft who, it would appear, of late years have been applying the surgical art to a needless and almost cruel extreme. At the same time he paid his respects to those who are commercializing medicine, running private sanitaria and wringing extortionate fees from their patients.

This address of Dr. Roberts must be conceded, in many respects as most timely and necessary, for every unbiased and thoughtful member of the profession, must concede that surgery has been vastly overdone of late, and that the time has come when silence may be construed as approval; therefore, the voice of re-

morstrance and protest should ring forth in no uncertain sound on this great and growing evil. The indifference of the profession on this subject has encouraged enthusiastic operators to press on and open up "new fields" (?) for their desperate exploiting, so that to-day, it is positively appalling and awful to read the reports of some surgical operations, which, under all other than rare and exceptional circumstances, are scarcely less than criminal.

This is particularly noticeable in the department of female surgery; in which, emboldened by the immunity with which a woman will survive spaying, parting with her sexual organs—as essential to her moral equipoise, as are the testes in the male—now, on the flimsy pretext of securing "better drainage" the inhuman procedure of sacrificing the uterus is resorted to, and the practice is so rapidly spreading that unless the profession give an early and emphatic note of warning the number of women so mutilated will soon be very large.

The modern shifting notions on pathology are largely responsible for the present state of things; the ever-haunting phantom of infection, from simple lesions, has led to the conclusion that local and radical measures are called for in the treatment of conditions which in the usual order of things are remediable through simple means, with the aid of systemic therapy.

But, those who live in glass houses should be cautious how they throw stones, and those who have "out-Heroded Herod himself" on the antisepctic theory should be circumspect in their utterances on conservative surgery. Dr. Roberts, we know, is among those who promised great things from the surgery of the brain, through the aid of antisepsics, cerebral-localization, etc.; though, as a matter of fact, it is now well known that brain-surgery is extremely dangerous to life; that antisepsics, the meninges nor medullary substance will not tolerate; and, that definite motor areas in the cortex, is by no means a settled question.

Dr. M. Price, in a late issue of the Medical and Surgical Reporter, "locked horns" with Dr. Roberts, and in a scathing rejoinder alleged that the latter had "grossly misrepresented the profession." This is strong language, which, it does not seem to us, is warranted by facts.

On the contrary, when a fellow of a craft has the manliness and courage to come forward and criticize or censure his own colleagues, and give utterances to views and opinions quite certain to affect his own income, he deserves our highest encomiums.

Dr. Roberts only erred when he broke away from his subject, and condemned private hospitals and disapproved of charging high fees to the wealthy. There are not enough general hospitals to afford places for all our brainy, highly cultivated brethren who follow surgery or other departments of medicine; besides, it should not be forgotten that except public hospitals, supported by the public funds, most others are essentially private, commercial concerns. A medical college opens, and it at once starts an hospital. Drs. So and So get together, wring a few thousand dollars out of someone, run fairs, concerts, theatrical shows, pass the hat around and so on; besides, under the guise of charity, keep a number of private rooms for pay-patients, thereby getting their hands down into the pockets of the outside general practitioner.

No, we have far too few private hospitals. If the profession would protect itself against the wholesale privacy of large hospitals, practitioners should unite in small numbers and open sanitaria numerously in every quarter.

The tendency is to a concentration, exclusion and an aristocracy of the few, in medicine, to the serious detriment of the many.

If the latter are sufficiently supine and indifferent in this matter no one is to blame but themselves.

On the fee question, it is surprising that any sane member of our profession can recommend that the same fee be demanded of the struggling, poor father of a family, as the

easy, comfortable business man or the opulent member of society. Most members of our profession, being humane and charitably disposed, are obliged to contribute a considerable proportion of their time to the needy and destitute. It is only possible to do this by exacting, from those able to pay, enough to provide for ourselves and families. This has been the unwritten law in the past, and there does not seem, now, the slightest shadow of excuse for abrogating it.

USES OF SALOPHEN.

Salophen is a product obtained by pouring phosphor oxychloride into a melted mixture of nearly equal parts of salicylic acid and nitrophenol, heated to 170 degrees.

Salophen contains about 51 per cent. of salicylic acid, and appears in small, thin, colorless laminae, combining the properties of phenol and salicylic acid in such a manner as to secure the therapeutic advantages of each without the toxic effects of either. It is nearly insoluble in cold water, more soluble in warm water and fairly so in alcohol and ether.

Salophen is easily decomposed by the pancreatic ferments and also some of the other fluids of the body. Acid gastric juice does not react upon it. Doses of 150 grains of salophen are well borne by dogs; the health of the animals remaining undisturbed, the appetite continuing normal.

The dosage of salophen ranges from 45 to 120 grains a day, in divided doses, some practitioners giving 15 grains three times a day, in the beginning, and increasing it by the same dose five or six times a day. Bicarbonate of soda may also be given with the salophen.

The preparations of salophen most usually employed are the dry powder, and the pill or tablet form; the most available for general use are the tablets and the latter may be advantageously combined with phenacetine.

The general clinical action of salophen is such that its applicability

in cases of acute rheumatism, while the febrile phenomena are marked, exceeds that of almost any other drug. It reduces the fever to normal on the second or third day of treatment. Ordinarily no objective symptoms remain after the seventh day. In cases where albumin and granular casts are present in the urine during the early stages, these disappear as the general condition improves.

Salophen has been used also in cystitis, sciatica and the neuralgias. It acts very promptly and positively; though with the greatest efficiency in acute rheumatism. In the latter disease pains in the joints often disappear in less than a week. Effusions into the joints are readily absorbed and large exudations become easily amenable to other treatment.

As salophen is not decomposed until it reaches the intestine it is presumed to have no possible action upon the stomach, and, as a matter of fact, no gastric troubles arise, which proves its worth over and above salol or salicylate of soda. The remedy may be given continually in large doses and for long periods of time without causing nausea, vomiting, loss of appetite, vertigo, or tinnitus. Salophen is eliminated by the kidneys.

One of the most remarkable therapeutic effects of salophen lies in its ability to prevent complications of endocarditis, percarditis or pleuritis. No cases of intolerance or gastric disturbance have been reported.

ERRATA.

In closing paragraph of editorial on page 68, issue of January 26, through a typographical error, the word importance is misused for impotence.—Ed.

The Philadelphia Board of Health.—The Councils of the city of Philadelphia having appropriated \$15,000 for supplying antitoxin, it is the intention of the Board of Health to establish a bacteriological laboratory.

Correspondence

THE CARL SEILER THROAT FORMULA.

What is Dr. Carl Seiler's (nose and throat specialist) alkaline and anti-septic formula? F.

Dr. Carl Seiler's formula is as follows:

R—Sodium bicarb.....	oz. i
Sodium baborat.....	oz. i
Sodium benzoat.....	gr. xx
Sodium salicyl.....	gr. xx
Eucalyptol	gr. x
Thymol	gr. x
Menthol	gr. v
Oil ganitheria	gtt. vi
Glycerin	oz. viiss
Alcohol	oz. ii
Water.....	q. s. to make 16 pints

M.

Cincinnati, O., Jan. 23, 1895
Dr. J. William White,
1810 South Rittenhouse square,
Philadelphia, Pa.

My Very Dear Doctor:—I received your letter recently concerning the removal of testes for hypertrophied prostate.

Since that time I have kept informed upon all things pertaining to this new work, so far as I have been able.

The following communication was just received from the physician who has charge of the patient whose testes I removed on October 26, 1894:

January 22, 1895.

"Dear Doctor:—The patient whose testes you removed on the 26th of October, 1894, for hypertrophied prostate, has no obstruction, straining or severe pain, which he formerly had while urinating. He passes water still too freely, and complaining some of burning and itching after micturition.

"I would say that he is well and doing nicely.

"Very Fraternally,
"L. M. Green."

Thus you see that the results in this case verify those of the others that have been reported.

I am thoroughly satisfied that this operation is one that, sooner or later,

will become generally adopted for the relief of hypertrophied prostate.

I am also satisfied that to you belongs the credit for first suggesting it; surely for doing the experimental work necessary to establish the facts concerning it.

You may use this letter in any way you deem proper.

I am, very truly,
MERRILL RICKETS.

THE KINGZETTE SULPHUGATORS.

We are in receipt from the American and Continental Sanitas Company, of New York City, a new form of candle for the purpose of fumigating and disinfecting. The contrivance consists of a fabric coated with sulphur; they are intended for fumigating cellars, closets, wardrobes, cupboards, lofts, kennels, carriages, stables, poultry houses, bird cages, etc., etc.

These "sulphugators" burn much more quickly than solid sulphur candles, on account of the freedom with which the air necessary for combustion gains access to the burning sulphur. They are extremely useful for fumigating where small quantities of sulphur only are required. Kingzett's "sulphugators" are put up in two sizes: Small size, 10 in a box, with holder, retail price, 25 cents; large size, 4 in a box, with holder, retail price, 25 cents. A great deal of bother and fuss in hunting up old pans in which to burn ordinary sulphur is done away.

When larger quantities of sulphur are required use the "Sanitas" pure sulphur candles (water jacketed), 1 pound, 25 cents.

This water jacket was placed on the market by this company over a year ago, and revolutionized the subject of disinfection of rooms. After small-pox, scarlet fever and other contagious diseases it is extremely useful. The success of these candles has been immense. The ease of application, the low price and the efficiency of the disinfection have placed these methods of fumigating far in the front. To once try the candles is to become convinced.

Book Reviews.

A MONOGRAPH ON DISEASES OF THE BREAST, THEIR PATHOLOGY AND TREATMENT. By W. Roger Williams, F. R. C. S. London: John Bale & Sons, Pubs.

We must regard this work as one of the most important and valuable that has thus far issued from the press on the subject it deals with.

The style is clear, the matter concisely expressed, practical and original. The author begins by giving a brief resume on normal development and the atypical; then takes up that terra incognita, the causation of cancers. This constitutes one of the most valuable and highly interesting chapters.

We are informed that now, at the present time, there are in England and Wales alone, more than \$10,000 cases of cancer. The influence of sex is emphasized, it being claimed that malignant disease is twice more prevalent in women than men. Virchow's theory of cell-gemmation and Cohnheim's views of aberrant structure hyperplasia are declined as unsatisfactory. The claims of mechanical irritation are repudiated. The author believes that the agency of micro-organisms need not be invoked in the genesis of cancer, and alleges that their presence here is no more necessary, than in the eruption of a tooth or nail, as all the pathological phenomena of cancer can be explained without them.

Senility is not admitted as a causative factor, *sui generis*, as his vast statistical columns show, that the malady commits its greatest ravages under 50 years, and that it is rare in old age. Cooper's dictum, on the influence of celibate life is refuted. The rich are more liable to cancer, the writer says, while the poor are comparatively exempt. Cancer, we are told, is on the steady increase, while the plague and smallpox have quite disappeared, and tuberculosis yearly becomes less frequent. This fearful scourge, we are informed,

commits its greatest ravages "on the temperate, regular-living, rather than the dissolute and dissipated," and Moore's statement is fully supported that "cancer is eminently a disease of persons whose previous lives have been healthy and whose habitual vigor gives them, otherwise, the prospect of a long life."

Coming to the special pathology of the breast, the latest views of the most distinguished authorities, with his own conclusions, are set forth at length. The various types of neoplasmata of the mamma are described in detail, and the clinical features of each stated.

On treatment, he is a strong partisan of early and thorough excision, in every case removing the pectoral fascia, opening widely the axilla and clearing out the lymphatic ganglia. The present pathological doctrines he interprets as pointing emphatically to the possibility of cure of cancer by radical and early operation.

Gussenbauer found cancer elements in the axillary glands in mammary disease, whether there was apparent implication of them or not; while, to offset these views, Winnawater's statistics and experience are included, in which, it appears, that, even when the so-called complete operation was done, yet the average of life after operation was only 13 months.

We have here only sketched a few of the many interesting and vital problems which are abundantly scattered through this unique and timely treatise, which to be fully appreciated must be read and studied from the introductory to the last page, for there has been no work offered the profession of late years which so largely fills a positive want and settles so many unsettled questions in connection with mammary cancer.

T. H. M.

TWENTIETH CENTURY PRACTICE. AN INTERNATIONAL ENCYCLOPEDIA OF MODERN MEDICAL SCIENCE. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In Twenty Volumes. Volume 1. Dis-

eases of the Uropoietic System. New York: William Wood & Company. 1895.

This is the first volume of what may justly be termed the crowning medical publication of a century rich in the literature of the healing art. The last great work of this kind, devoted to internal medicine, that of Ziemssen, was published before the new science of bacteriology was developed; and it is fitting that now the publishers of the English translation of that work should bring out a new encyclopedia of modern medicine as it is at the end of the nineteenth and beginning of the twentieth centuries. As we learn from the announcement, the work will consist of twenty volumes, the first twelve being devoted to the systematic affections, including diseases of the skin and nervous system, and the remaining eight containing treatises on the infectious diseases. The writers have been chosen from all the countries of Europe as well as from America, and are almost without exception men of international reputation who have won for themselves a position in the first rank of medical teachers.

Volume 1, which has just appeared, treats of diseases of the uropoietic system. The first article, on diseases of the kidneys, is from the pen of Dr. Francis Delafield, of New York. The classification of kidney diseases, which the author makes, is extremely simple, and assists the reader greatly in arriving at a clear understanding of the morbid changes which these organs undergo. The diseases of the renal pelvis, the ureters and the bladder are presented in two excellent articles, by Mr. Reginald Harrison, London. These are followed by two systematic and lucid treatises on the diseases of the prostate and male urethra, by Dr. G. Frank Lydston, of Chicago. The diseases characterized by changes in the urine (haematuria, cystinuria, chyluria, pyuria, etc.) are discussed by Mr. Hurry Fenwick, of London, an acknowledged authority on these affections. The albuminuria of nephritis and diabetes mellitus are not included in this article. The closing

treatise of the volume is one on the diseases of the female bladder and urethra, by Dr. Howard A. Kelly, of Baltimore. In this article the author describes at length his new method of examination of the bladder and ureters in the female, which we believe has never before been described in any text-book or treatise.

The illustrations, of the first and last articles especially, are beautiful in design and execution.

BOOKS AND PAMPHLETS RECEIVED.

BIOGRAPHICAL SKETCH OF PROF. JOHN M. SCUDDER, M. D., from Eclectic Med. Journal, Cincinnati, O.

"DIPHTHERIA ANTITOXIN," Schering. From Schering & Glatz, New York.

THE TRUE FIELD OF DUTY OF THE RAILWAY SURGEON. By Clark Bell, Esq., Vice-Chairman Section of Medico-Legal Surgery, Medico-Legal Society. (Advance Sheets of December Number of Medico-Legal Journal.)

HYGIENE OF THE ANUS AND CONTIGUOUS PARTS. By J. Rawson Pennington, M. D., Chicago. Reprinted from the Journal of the American Medical Association, January 12, 1895. Chicago: American Medical Association Press. 1895.

DR. J. C. WILSON IN CHARGE OF JEFFERSON HOSPITAL.

James C. Wilson, M. D., has been elected superintendent of Jefferson Medical Hospital, to fill the position made vacant by the resignation of Dr. E. E. Montgomery nearly a year ago.

Dr. Wilson is professor of practice of medicine and clinical medicine at the Jefferson College. He was born March 25, 1847, and graduated from Jefferson Medical College in 1869.

In 1876 he became physician to the Philadelphia Hospital, and has been connected with Jefferson College Hospital for a number of years. He is a distinguished member of the Pathological Society, Obstetrical Society, Philadelphia County Medical Society, American Medical Associa-

tion, American Philosophical Society, Association of American Physicians and Pathologists, Philadelphia Neurological Society, etc.

At the meeting of the Board of Trustees it was decided that the members of Finance, College and Hospital Committees should be elected by the board instead of being appointed by the president, as has been the practice in the past.

Electro-Therapeutics.

IN CHARGE OF
DR. S. H. MONELL, New York.

A PLUNGE INTO ELECTRO-THERAPEUTICS.

(Continued.)

In our last article we left a promising electro-therapeutist struggling with the technique of metallic electrolysis. His electrical outfit included a recent purchase of eight copper tips, together with his well-known battery described in the catalogue as follows: "Battery No. 3. More desirable for a physician; has a large coil, rapid vibrator; gives three variations of the current; has solid oak case, and is furnished with handles, cords and sponge electrodes, for \$20 list." (Discount to the profession, 25 per cent.)

He has attempted to use the copper tips by screwing them on the wood handles, from which, with great and original ingenuity, he has unscrewed and removed the sponges. Owing to a disproportion in size they do not fit, and he writes a complaint to the makers in New York. By mail a week later he learns that a special handle is required, price \$2; and, having determined that no obstacles shall stop his scientific employment of the grand therapeutic agent he has so recently discovered, he orders a pair immediately. When they arrive he prepares to abandon medical prescriptions and topical applications for all forms of catarrhal conditions of mucous membranes, and rely exclusively upon "Electrolytic Cataphoresis." Cases wait in his reception room, and he gets the battery ready, attaches a copper electrode to each new handle and a handle to each cord.

Now let us again attack our old case of endometritis. One pole must be "intra-uterine," the book says; and, being an expert gynecologist, there is no trouble in placing it in position. The other pole, of course, "may be held in the hand." Very simple. Certainly electricity is beautiful when one has all the requisite appliances! Now the patient is all ready and the current may be turned on!

From a feeling of sympathy for all parties concerned, I draw the curtain upon what happened when that energetic faradic current was turned on.

The patient had been an old family friend. She had before hopefully tried many things the doctor had recommended; but it is her present view, in which her physician entirely coincides, that "cupric electrolysis" is not suited to her case. She does not mean to disparage the remedy, but is inclined to regard it as a little worse than the disease. Between the two her choice is endometritis every time.

I would give a good deal to hear the doctor's private opinion about her "foolish hysterics" just when he had everything so thoroughly prepared to treat her case—but Dr. Holmes is a discreet practitioner, and he now gives her a sugar-coated placebo.

The doctor was naturally a student. In employing a new remedy he made it a point to read up the printed matter very fully. He pursued the same custom now. The more he read about medical electricity the more favorably it impressed him.

It appeared to be even more efficacious than he had supposed. About this time he also made an astonishing discovery, viz.: that his "three-current" battery was one kind of electricity only, instead of three varieties, and did not supply any galvanism at all. Professional enterprise demanded that he should have every modern aid to medical science, and he recognized that the future called for liberal expenditure rather than parsimonious old-fogyism.

After some correspondence the

makers allowed him \$5 for his second-hand battery, and sold him a 16-cell combined galvanic and faradic apparatus for \$38. As the catalogue states, "This combination enables the physician to use either form of current at will, and in this respect is especially desirable for office practice or for the specialist."

This was what his enlarged experience told him that he required, and with it he foresaw that he would naturally drift into becoming an electrical specialist later on. It weighed four times as much as his first investment, and on his office table its appearance was exceedingly gratifying. He now felt prepared for difficult cases of all sorts.

One was soon found—an elderly lady—chronic sciatica of 30 years' standing; but, having two batteries combined instead of but one, he was at a loss to know which of the two to use. Here the doctor's studious turn of mind came to his rescue, and he secured the following guiding facts out of his library:

1. Duchennes' treatment consisted in severe faradization of the painful area, limiting the action to the cutaneous surface. After the application of the dry brush the patient is astonished to find all pain of the sciatica gone, and, though he tries to provoke its return, it does not do so. One, four, six or eight treatments will cure.

2. Von Ziemsen says that in the galvanic treatment of neuralgic pains large electrodes should be used; and it has even been proposed to use electrodes large enough, if possible, to cover the whole of the affected area at once.

3. Steavenson says this painful affection is particularly suited to treatment by the electric bath. A course of twelve baths usually suffices to effect a cure. The ascending direction of the current should be preferred.

4. Hutchinson states—Galvanism will relieve almost every case. Use a descending current. Faradism is to be strongly deprecated here. In ordinary case, place foot in basin of water, with negative pole. Press a small carbon wash leather-covered

button firmly over nerve's exit from ischiatic notch to localize the current in the nerve. Increase dose to all patient can bear. Apply 30 minutes daily. Three weeks will cure.

5. Dr. A—advocated the treatment of sciatica by the strong galvanic current.

6. Dr. B—was in the habit of using the faradic current in the treatment of sciatica.

7. Dr. C—. Begins with very small currents of galvanism, say 1 1/2 milliamperes or less, cautiously applied for one minute. Gradually increase to 3 mil. for three minutes, when improvement takes place. He ignored the matter of current direction, and believed that the idea that it was of any importance was worthy only of the Dark Ages.

8. Dr. — advised the rest cure, followed by electro-cautery applications to the painful points, and later electrical massage.

9. Dr. E—pounded the course of the nerve with long, thick percussion sparks. A few treatments gave permanent relief. This surpassed all other methods and gave quicker and better results.

Doctor Holmes thoughtfully read over these rules for the electrical treatment of his sciatic patient.

They were somewhat more prolific than he had expected to find. He examined his apparatus. He had, besides the new "combination," the same cords, wood handles and sponge electrodes that he had before, and the set of copper tips purchased when he attempted to perform cupric electrolysis with his original faradic battery. How should he proceed? Common sense principles helped him out of his dilemma, and he adopted a process of eliminating the impossible.

For instance, in Rule No. 1 he had no "dry brush," and did not know what one was. Hence Mrs. B—was spared the infliction of Duchennes' remedy. In No. 2 he had no electrode large enough to cover Mrs. B—'s whole limb, hence Von Ziemssen's plan was out of the question. No. 3 spoke of an electric bath. He had no such affair; and, moreover, the idea of his bathing a fe-

male patient was preposterous. No. 4 came nearer the mark. He could provide the foot basin of water, and possibly one of the sponge electrodes might serve in place of the missing carbon button covered with wash leather; but he did not fail to note the direct conflict between No. 3 and No. 4 in regard to the direction of the current. He was too cautious now to risk an ascending current when a vice versa was required, and he had no way to prove whether Steavenson or Hutchinson was right. Observing the objection to faradism recorded in No. 4, he was glad he had not used it as Duchenne advised.

No. 5 was simple, straightforward and much to the point. He liked it on these accounts, and laid it aside for future reference. No. 6 rather astonished Dr. Holmes, and caused him to lose confidence in the man who could recommend faradism for sciatica. No. 7 looked safe, and at once appealed to his recently-developed bump of caution. The brief time required (one minute) would be a great convenience in his office practice, and he noted with satisfaction that here was an author who helped him out of his quandary about current direction. If Dr. C— ignored it, so would he.

Arriving at Nos. 8 and 9, he puzzled over them at some length. He knew just what a cautery application was, but he sought vainly in the directions accompanying his 16-cell galvanic and faradic combination for any hint as to how to produce it with sponge electrodes. Several experiments satisfied him that he did not quite understand how to do it. "Rest" and "massage" were simple enough, but he did not like to adopt No. 8 and omit the cautery. It would seem like the play of Hamlet with Hamlet left out.

No. 9 excited his curiosity. It "surpassed" all other methods, and in this respect he felt that Mrs. B— would be pleased; but what were long, thick, powerful percussion sparks, and how could he apply them with his new battery? Should he attach the sponge electrodes to the faradic or the galvanic side of the combination? He had Mrs. B—

wait while he made a private trial of both, but time was too short to work out the problem fully, and he decided to begin with No. 7, and if it failed to try No. 5.

The following day's mail contained this letter from Dr. Holmes to the manufacturers from whom he had purchased the "Combination:"

Messrs. Blank & Blank.

Gentlemen:—I recently ordered from your firm a 16-cell combination battery. On attempting to treat a case of sciatica with it I fail to find any directions about the milliamperes. Please inform me how many each cell equals, and what a milliampere amounts to. I endeavored (following a leading authority) to apply 1 1-2 milliamperes for one minute, but, although I employed 5 cells at first, and finally 10 and afterwards the entire 16, I was unable to start the vibrator into action. The battery is evidently out of order. Please send me full instructions at once and oblige Yours very truly,

JAMES W. HOLMES.

While awaiting a reply he chanced upon an article in a medical journal stating that no therapeutic application of the constant current should be made without the presence in the circuit of a reliable milliampere-meter.

S. H. MONELL.

44 West 46th st., New York.

Medicine.

DR. E. W. BING, Chester, Pa.
COLLABORATOR.

EMPYEMA OF THE FRONTAL AND ETHMOIDAL-SINUSES.

M. Muller distinguishes the varieties of empyema in the frontal sinus, into the acute and chronic.

The first is very rare. He saw but three cases, all of which ended mortally. In these cases the primary causes seemed to arise from an attack of influenza. The onset is sudden, hemicrania violent, with lancinating pain propagated along the nose. Later ptosis, with tumefaction of the upper-lid; exophthalmia and diplopia.

The chronic form may succeed the acute, or pursue a torpid course from the beginning. A localized cephalgia on one side, over the eye, is quite characteristic. Later, when the emergent duct is completely closed, the cavity is dilated by the retained products of inflammation, which may possibly make an escape by the inner side of the orbit.

For this variety Fuch recommends that the anterior wall of the sinus be completely cut away, the pus drained off and the cavity so completely curetted as to leave none of the granulating residue of ulceration.

All his cases did well so treated. M. Muller, however, prefers to enter the sinus on its inferior aspect.

Empyema commencing in the ethmoidal-sinuses may make its way forward, into the orbit, in two ways. In one perforation occurs after tumefaction of the upper lid and exophthalmia; in the other the ethmoidal cells are so distended as to produce a fullness at the inner angle of the eye, sometimes mistaken for a neoplasm if extreme caution is not taken. Muler saw, in two of these latent cases, pus, proceeding from the themoid, open into the lachrymal-sac.—Le Mecredi-Medical, 12th Dec., '94.

TREATMENT OF BUBO.

M. Laub has reported a series of cases of bubo, which he has treated with great success by Welander's method. This consists in first, making several narrow, deep punctures and evacuating the pus, then injecting deeply a 1-1000 solution of nitrate of silver through each puncture, after which a compress and bandage are applied. Reaction is moderate, inflammation ceases and in about 10 days cure is complete.—College des Med. de Vienne; Mercredi-Med., 19th Dec., '94.

TREATMENT OF ACUTE PLEURISY.

In view of the fact that acute pleurisy is frequently the starting point

of tubercular evolution, Dujardin Beaumetz says: There are many cases of persons who have had pleurisy but in whom no tubercular manifestations have followed, and on the contrary, autopsies have shown tubercular granulations, with all the signs of inflammatory pleurisy, in which if the patients did not become tubercular, it was because the process was local. Since the action of cold will produce inflammation in other serous structures there is no reason why the pleura should be an exception. The question of origin has considerable importance in the indications for treatment.

Physicians are divided as to this question. Some advocate active measures, others simply remove the effusion by puncture if it becomes excessive. Forty years ago the treatment pursued was this: 1. Blood-letting. 2. Purgatives and diuretics. 3. Blisters. 4. Theracentesis was reserved for chronic cases. With M. Peter disappeared the last defender of the antiphlogistic method, and now general bleeding is abandoned.

Local bleeding, however, is frequently used as a revulsive. Bucquoy, in France, is the only advocate of local bleeding as an antiphlogistic measure; he takes from 300 to 400 grammes at once.

Internally salicylate of soda has been successful. Beaumetz is an advocate of large blisters.—Rev. Medicale.

Ophthalmology.

DR. J. A. TENNEY, Boston, Mass.
COLLABORATOR.

PYRAMIDAL CATARACT.

Mr. Treacher Collins gives in the Lancet the theories of the causation of pyramidal cataract advanced by Mr. Hulke and Mr. Hutchinson, with his own views upon the subject.

Mr. Hulke argues, that in infancy the anterior chamber of the eye is shallow, and the lens is nearly spherical, so that it will project quite a distance in front of the pupil. In

these respects there is in the infant's eye a striking similarity to the eye of the fish.

In Ophthalmia neonatorum, if the cornea has become inflamed and swollen, the posterior surface may come in contact with the projecting lens, and then a dot of lymph is poured out upon the latter from the inflamed cornea, or the mere contact may give rise to an opacity by preventing the proper nutritional osmose through the cornea. He thinks that the little white cones, which seem to project through the pupil in pyramidal cataract, have their origin in this way.

Mr. Hutchinson ventures the opinion that the proximity of the inflammatory action in the conjunctiva and cornea is sufficient to disturb the nutrition of the lens capsule, and so occasion deposits. He holds, that if this position is tenable, we have an interesting instance of the possibility that diseased action may, by what he calls a sort of vital catalysis, disturb a structure with which it is not in continuity, and even when the intervening cornea is unaffected.

In criticising the views of Mr. Hulke, Mr. Hutchinson says: "I cannot but suspect that we adopt hypotheses which are too mechanical when we attribute these little opacities either to corneal perforation, or to prevention by pressure of nutritional osmose. As regards the latter, we must remember that there is excess, not deficiency of growth."

Mr. Collins leans to the view set forth by Mr. Hulke, that actual contact of the cornea with the anterior pole of the lens arrests the osmose of the nutritional fluids to it in that position.

When the opacity is congenital he holds that the contact is due to the delay in the formation of the anterior chamber, which prolongs the apposition of these structures (which exists normally during a part of foetal life), after the fibro-vascular sheath has disappeared.

In infancy, when the anterior chamber is shallow, swelling of the inflamed cornea may bring about contact of that membrane with the

lens without corneal perforation. Later in life the formation of anterior polar cataract is less common, and it would seem that the cornea must then be perforated in order to have the lens come in contact with it.

Mr. Collins disposes of Mr. Hutchinson's objection, that the opacity is a growth, instead of being an interference with nutrition, by putting forward the hypothesis that the arrest of the osmose of nutrient fluids through the capsule at the anterior pole causes the lens fibres in that region to shrink, and to break up into hyaline globules and granular detritus. As a consequence of their shrinking and degeneration, the tension of the capsule at the anterior pole is lessened.

It is pretty certain that the only thing that prevents the epithelial cells that line the capsule from proliferating more quickly than they do is the tension to which they are subjected; therefore, when the tension at the anterior pole is lessened they at once begin to multiply at an increased rate, and form the mass of cells, which is the earliest stage of these opacities.

Miscellany.

FURTHER REPORT ON ANTI-TOXIN.

Soltmann reports (in Deutsche med. Woch., January 24, 1895) 193 cases of diphtheria treated at the Leipzig Children's Hospital between April 1 and December 31, 1894. Of these 50, or 27 per cent., died. During the first four months, in which the serum treatment was not generally used, 28 out of 71 children died, or 39.8 per cent.; in the last five months, during which the majority of the children received the serum treatment, 22 out of 122 children died, or 18 per cent. Of this last group of cases 9 out of 33, or 27.2 per cent., not treated with serum, died, and 13 out of 89, or 14.6 per cent., of those receiving the serum treatment.

**RESOLUTIONS ON THE DEATH
OF DR. A. L. LOOMIS.
UNIVERSITY OF THE CITY OF
NEW YORK.**

January 25, 1895.

At a meeting of the faculty held this day the following preamble and resolutions were adopted:

Whereas, In the wisdom of Almighty God it has been decreed to remove from among us our esteemed and honored associate, Dr. Alfred L. Loomis, who has been for thirty-three years identified with the progress and development of the Medical Department of the University of the City of New York, and to whose untiring energy and zeal that institution largely owes its present high position, we, the members of its faculty, hereby

Resolve, That in the death of Dr. Loomis we have met with an irreparable loss, in one whom we have ever valued as a friend, respected for his judgment and wise counsel, and admired for his strength and firmness of character, for his professional skill, his scientific learning and his literary attainments; that, while overcome with a sense of personal bereavement, we are not unmindful that the medical profession throughout the country has lost its foremost leader and the public a distinguished citizen. And be it further

Resolved, That this resolution be spread upon the minutes of this meeting, and that a copy be suitably engrossed and sent to the family of Dr. Loomis in token of our profound sympathy and sorrow.

CHAS. INSLEE PARDEE, Dean.

Fire at the College of Physicians and Surgeons, Boston.—Fire was discovered on Sunday morning, January 27, in the flooring between the second and third stories of the College of Physicians and Surgeons, Boston. The alarm was promptly given, the flooring was cut away, and the portion of the building in which the fire occurred was deluged with water. A number of pathological specimens in the museum were damaged, and the total loss from fire and water is estimated at \$10,000. The cause of the fire is unknown.

A CAUSE FOR RUINED TEETH.

A correspondent who is an authority on chemistry draws our attention to the fact that a Bradford dentist has 60,000 extracted human teeth, all in one heap, exhibited in his window. What thousands of hours of pain and moments of agony are here depicted, not to mention the ill-health consequent on the loss of these essentials to real vigor. If every dentist thus exhibited his gleanings from the jaws of suffering humanity surely the public would begin to look for first causes, and, according to the highest medical testimony, leaden pipes for conducting drinking water would speedily become an extinct species. Dr. Swan, the Medical Officer of Health, of Batley, said the other day, in speaking of the danger of leaden pipes, that they are degenerating thousands. A degeneration produced by the cruelest of slow poisons—"a poison which destroys men's bodies, minds, morals and intelligence, and from which the majority has no means of escaping."

—Science Siftings.

CHEAP COLLEGE BIDDING.

We have received the circulars of the Chicago Summer School of Medicine, of which Dr. W. F. Waugh is dean. The most notable feature of this catalogue is the following, addressed to doctors:

Dear Doctor:—The college has placed at my disposal a limited number of scholarships, by virtue of which students of excellent moral character, good educational qualifications and limited means will be admitted to the classes at a material reduction from the regular fees. If you can favor us with the names of any such gentlemen we shall greatly appreciate the courtesy.

Sincerely yours,

Wm. F. Waugh, M. D., Dean.

We had hoped that this kind of underhand bidding for students was about extinct among reputable colleges. Institutions, whether educational or commercial, which have two prices, are not in good odor, and should be discountenanced.—Indiana Medical Journal.